

AMENDMENTS TO THE SPECIFICATION

These amendments to the specification are intended to complement the proposed amendment to the drawings.

At page 8, after line 35, insert the following paragraph:

Figure 1A is an enlarged view of a sparking device of FIG. 1, illustrating a plume formed at a spark gap when energy is discharged into the sparking device;

At page 9, after line 8, insert the following paragraph:

FIG. 3A is a timing diagram illustrating a temporal relationship among trigger signals for the output stages of FIG. 3;

At page 29, amend the paragraph starting at line 6 as follows:

The second destination of the signal generated by comparator 52 is the logic circuit 49. As shown in FIG. 1, this signal is received at the FIRE input 44 of the trigger logic 43 which tells the circuit that the desired energy storage level has been accomplished and that the output stages [40] are, thus, ready for firing. In the preferred embodiment, the trigger logic 43 triggers the stages [40] by sending trigger signals down the appropriate trigger signal connections [41] in accordance with rules stored in the energy/delay matrix 45. These rules determine whether each individual stage is fired at all, and when, relative to the firing of the first stage, they will each be fired. Thus, depending on the rules stored in the energy/delay matrix 45, the trigger logic 43 will trigger one or more of the output stages [40] to transfer an overlapping (e.g., Fig. 3A), partially-overlapping, or non-overlapping output waveshape or pulse to the spark generating device 50. The spark generating device 50 will then produce a spark whose time-varying plume shape shown in Fig. 1A and energy level will correlate to the waveshape and energy level of the received pulse.